The Practical Band Arranger.

W. Elmo Hoffman

THE PRACTICAL BAND ARRANGER

LAURENDEAU

CARL FISCHER'S EDITION

THE
Practical Band Arranger

A Systematic Guide for Thorough Self-Instruction

THE ELEMENTS OF HARMONY — CHARACTER AND COMPASS OF BAND INSTRUMENTS AND THEIR PRACTICAL USES — TRANSPOSITION — ARRANGING, ETC. — PROVIDED WITH NUMEROUS MUSIC EXAMPLES AND FULL SCORE ILLUSTRATIONS

BY

L. P. LAURENDEAU

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ARRANGING BAND MUSIC

BY

L. P. LAURENDEAU

PRELIMINARY REMARKS

Arranging music is both an art and a science. It demands a knowledge of at least the elements of harmony and composition, the compass, character and mechanism of instruments, and a full acquaintance with transposition. This is the "scientific" aspect of the subject. The "artistic" side of the question lies in the judicious choice of tone effects, like color effects in painting; the invention of "side" melodies, variations, embellishments, etc.

We do not wish to discourage the student by this rather formidable exposition of the requirements of the case, but do wish to impress upon his mind the necessity of adequate study. There is no "royal road" to the mastery of the art of arranging music; therefore the amateur with the ambition of attaining some degree of ability in the art must be willing to labor arduously in order to reach the goal.

In these talks we shall endeavor to smooth the way for the student, and to show him how to direct his efforts; but he must do his share, and study diligently.

We shall commence by treating of elementary harmony, a knowledge of which is a positive necessity to the arranger. The student must patiently wade through this seemingly arid subject, striving to assimilate all details; this course, well pursued, gives promise of ultimate, if laborious, success.

PART I

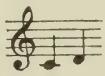
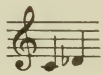
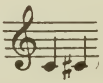
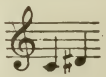
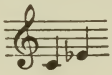
THE ELEMENTS OF HARMONY

To the arranger working from simply a melody part a knowledge of harmony is obviously essential. But some may think that in order to work from a piano copy, or a piece of music already harmonized, little or no knowledge of the science is required. This is an error; in either case the arranger must know enough of harmony to understand chords, their progression, resolution, etc.; otherwise his arrangements will always be faulty, and although they may "sound well" to himself and perhaps to his friends, yet to the enlightened musician they will betray his lack of scientific knowledge.

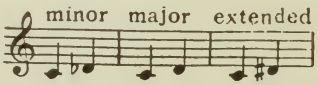
The aspiring arranger must do his best to master the principles here laid down, and which we shall endeavor to elucidate in the clearest and plainest manner possible. We assume that he already possesses a complete knowledge of the rudiments of music; therefore we shall not deem it necessary to consider that subject here.

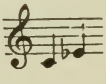
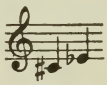
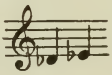
CHAPTER I

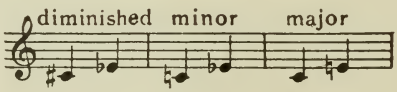
INTERVALS

An *interval* is the distance from any one positive musical sound (here called "tone" for convenience) to another. Intervals are called "major," "minor," "extended," "diminished" and "chromatic." When the distance from one note to another is a full tone, the interval is major. We call it the *major second*,  When the distance is only a half-tone, we have the *minor second*,  The *chromatic second* is practically the same interval to the ear as the minor second, because it sounds the same; but it is different to the eye, and is considered another interval altogether,  When the distance is one tone and a half, we have the *extended second*,  This is another instance where the ear and the eye are not in accord, for the extended second sounds like this:  which, as we shall presently see, is quite a different interval.

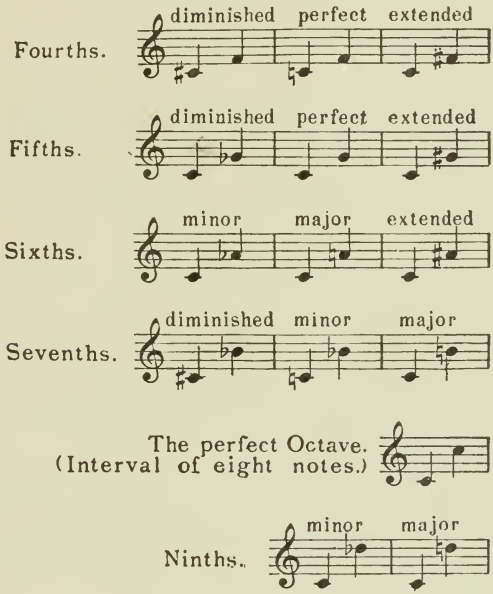
Here are all the seconds employed in harmony:



When the distance from one note to another is two full tones, the interval is a major third,  When the distance is one tone and a half, it is a minor third,  When the distance is only one tone to the ear but one and one half to the eye, it is a *diminished third*,  This interval has a similar sound to that of the major second  but must not be confounded with it. The thirds employed in harmony are



We have considered the intervals of the second and third at some length; but in order to keep within allotted bounds we will deal with the other intervals in a more concise way. The student by this time knows that a second is the distance from one note to the next, *as seen on paper*, and that a third is the distance from one note to the third note above it in regular order. This process or method is the same for all other intervals. We will now give examples of all the intervals, leaving to the student the task of reasoning them out.

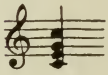
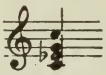


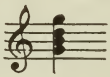
The student should write these intervals from different notes, in order to recognize them in any key in which they might occur.

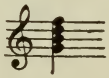
CHAPTER II

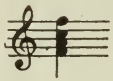
CHORDS

A *chord* is the union of two or more sounds. A *full chord* consists of at least three sounds. We will consider only what may be termed the *elementary* chords.

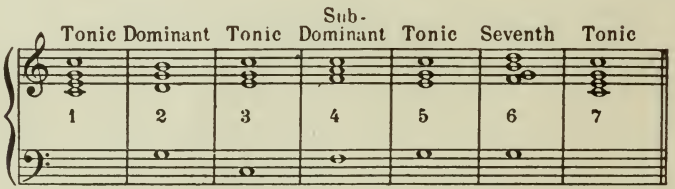
The chord of the tonic, or common major chord,  is founded on the first note of the scale. It consists of the following intervals, starting from the bass note: major third, perfect fifth, perfect octave. If the first interval be minor, we then have the minor common chord, 

The chord of the dominant (or fifth) is based on the fifth note of the scale, and consists of the same intervals as the chord of the tonic, 

The chord of the seventh is also built from the fifth note of the scale; but the last interval, instead of being an octave, is only a minor seventh, from which the chord takes its name, 

The chord of the subdominant (or fourth) is founded upon the fourth note of the scale, and has the same intervals as the chord of the tonic, 

Here is a succession of the above chords:

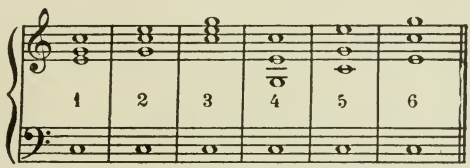


The above simple example presents several points of observation to the student. He will find, at measures 2, 5 and 6, that the notes comprising the several chords do not appear in the same order as in the examples first given. This introduces the subject of *positions* and *inversions.*

CHAPTER III

POSITIONS — INVERSIONS

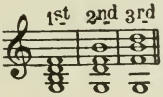
No matter in what order the various notes composing a chord may appear, it is still the same chord. Thus, the following is always the common chord of C, but in its *six different positions:*



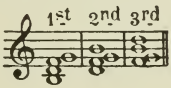
When the highest note of the chord is the tonic, or first note of the scale, the chord is in the *first position;* when the highest note is the third, the chord is in the *second position;* and when the fifth is the highest note the chord is in the *third position.* The last three positions are called *dispersed harmonies.* It should be noted that the tonic, third and fifth always retain their appellations, no matter in what order they may appear in the chord. Thus, E in this example  is always the third, although in this case it appears as the bass note. Each of the three notes of the chord may be used as bass note. When another note than the tonic is so employed, the chord is *inverted.* There are two inversions of the chord of the tonic: When the third is the bass note, the chord is in its *first* inversion,  When the fifth is the bass note, the chord is in its *second* inversion, 

The positions and inversions of the chord of the dominant, also those of the subdominant, are the same as in the chord of the tonic.

The positions of the chord of the seventh are



The inversions of the same chord are



The reasons for the positions and inversions of that chord are the same as those for the chord of the tonic.

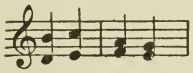
The above examples should be transposed into different keys, in order to familiarize the student with the several positions and inversions of chords in all keys.

CHAPTER IV

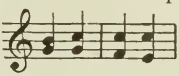
PROGRESSION — MOTION — RESOLUTION

This is a most important matter for the arranger, as a clear knowledge of these points is imperative if he is to distribute the various notes of chords among his several instruments in the proper manner.

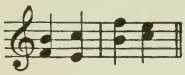
Progression is the progress of parts from one interval to another. It is made in *similar* motion when the parts move in the same direction,



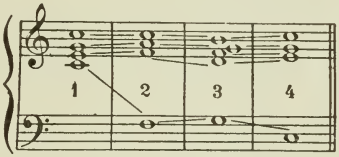
It is made in *oblique* motion when one part moves and the other is stationary,



It is in *contrary* motion when the parts move in opposite directions,

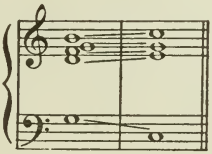


Resolution is the passing from one chord to another,



In this example the dashes indicate the progress or direction of the several different notes of the chords. Each of the notes of a chord has a tendency to resolve itself on some other particular note. Thus, B, the leading note, or seventh of the scale, has the impulse of moving to the note above, the *tonic*. F, the fourth, has a still stronger impulse to go to the note below (which is the third, E), except when it is used as bass note for the chord of the subdominant, when it goes up to the fifth, G. See measures 2 and 3 of the above example.

The most natural resolution of the chord of the seventh is

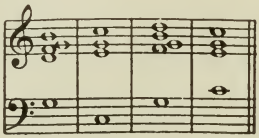


The upper part, B, goes to C; G is stationary, while F goes to E, which is its only possible destination in this case. D also goes to E; it could

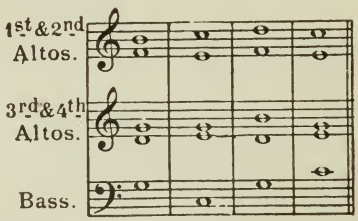
have been resolved on the note below, C below the staff. But this would have created a "hidden octave," about which we shall remark later on.

In this resolution we employ contrary motion; that is, the extreme parts move in opposite directions, which is the safer and more satisfactory motion to use, in order to avoid false progression, a subject with which we will shortly deal.

We will now suppose that we have the following chords to distribute to four altos and one bass:



We would proceed as follows:



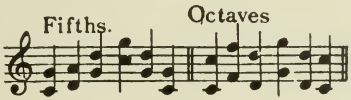
This is perhaps anticipating, for we are now leaving the subject of harmony and going to some details of arranging; we however feel justified in making the digression, for in this manner we give a practical application of theory.

We do not use the two higher notes for first and second altos. This is for the special purpose of insuring a "close" or "full" arrangement, playable with few instruments. A small band seldom has four altos, therefore we have given the most essential notes to the first and second altos. Had we distributed the four notes of the chord of the seventh in regular order to the four altos, the chords in measures 2 and 4 would have been without a third in the case of a band having only two altos. It will also be noted that in the third measure the third alto has the leading note, B, which according to our previous statement should ascend to C. Here, on the contrary, it descends to G. But it should be remarked that the first alto produces the C, the third alto going to G to complete the chord.

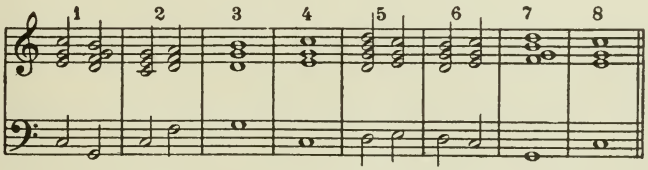
CHAPTER V

FAULTY PROGRESSIONS

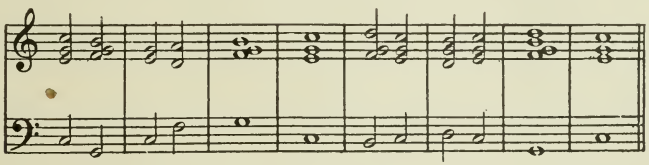
Faulty resolution produces faulty progressions, such as consecutive fifths and octaves, which are forbidden as being unsatisfactory to the ear. Here follows an illustration of them:



In this example the consecutive fifths and octaves are obvious. It is in the course of progression of chords that they may occur, from lack of attention or knowledge on the part of the arranger, without his notice.

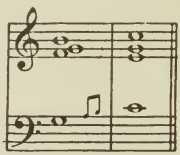


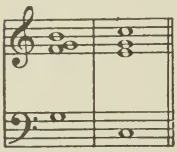
In the second measure there are consecutive fifths between the lower and upper notes of the treble staff; in measures 4 and 5 there are consecutive octaves between the bass and the extreme upper note. There are also other consecutive octaves in the example, which we leave to the student to discover, as an exercise on intervals. These consecutive fifths and octaves would be avoided by harmonizing the example as follows:



Octaves may not be apparent, yet may still exist. Such are called *hidden octaves*. The small notes in this example, although they do not actually appear, are implied, creating consecutive octaves between the

bass and the upper note. The cause of this fault is the employment of similar motion. To remedy this defect we have only to employ contrary motion, as here shown:

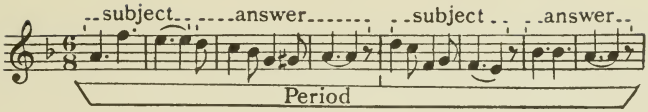




It is perhaps needless to remark that passages in unison, where all parts play the melody, or where certain instruments play the melody or some figure in octaves, do not come under the rule of forbidden octaves. We may also add that the rule against consecutive octaves is very commonly violated in extended arrangements. Moreover, the rule against consecutive fifths (which are regarded as more serious offences) is frequently cast aside by the masters, especially those of the ultra-modern school. An experienced harmonist may do things that would be risky for the amateur to attempt; and therefore we advise the student to adhere strictly to the rules until he is capable of discerning when and where liberties are allowable.

This concludes our brief exposition of the first principles of harmony. When the student has mastered these principles he must not imagine that he is a full-fledged harmonist; on the contrary, his knowledge will be somewhat rudimentary. But he will be ready to attempt arranging compositions which are already harmonized. Above all, he will be prepared to take up a regular treatise on harmony, and will understand it much better after having fully digested the simple rules we have here explained. We recommend to him Weber's "Text-book for the Study of Harmony," $1.25; Richter's "Manual of Harmony," $2.00; or Parkhurst's "Complete System of Harmony," $2.00, all published by Carl Fischer, New York.

The arranger should also know something of the construction of melodies. A melody is composed of phrases and periods, the first part of a phrase being the subject, or question, followed by an answer completing the phrase, two phrases forming a period. In the lighter forms of composition (marches, waltzes, caprices, etc.), with which the amateur is most likely to be concerned, each part of a phrase is composed of an even number of measures; the subject having two measures, the answer two also, making a phrase of four measures, these four measures constituting the first half of a period. The second half of the period is similarly constructed, the full period, consequently, being composed of eight measures. We select as an example Tobani's well-known "Hearts and Flowers":



This knowledge will be useful to the arranger when he finds it advisable to disperse parts of a melody to different instruments, either to permit the player of some certain instrument to rest by alternating with some other, or for the purpose of creating a different effect by adding or subtracting instruments. These changes should be made at the commencement of a phrase or period; for instance, should the arranger wish to have the solo and first cornets alternate in playing the melody just given, he should make one play the first four measures, or phrase, the other playing the second phrase.

We will now proceed to the consideration of the various instruments found in the average amateur band.

PART II

CHARACTER AND COMPASS OF BAND INSTRUMENTS

We will try to consider this subject in the briefest possible manner, for any one possessed of an ambition to arrange for band must be to some degree familiar with band instruments, their effects, possibilities, etc. All reference to acoustics and other technical subjects will be avoided; our observations will be confined to the judicious use of the various instruments in a score.

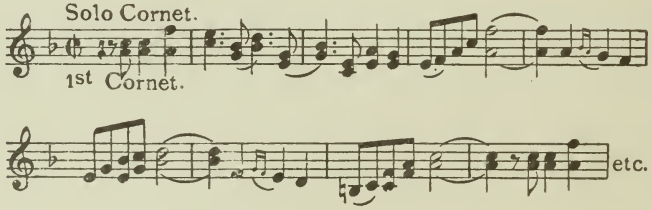
CHAPTER I

THE CORNET

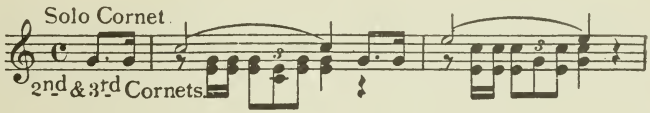
The B♭ Cornet. — In the purely brass band the B♭ cornet holds the same position as the violin in the orchestra — it is the leading melody instrument. Its compass extends from  with some higher and lower notes possible, but not practical, generally speaking. It is always prudent to avoid the extreme notes of either the lower or the higher register when writing a cornet part. In practice, it is well to write no higher than A above the staff, and even that not too frequently. The arranger should feel that he is writing for players of average ability rather than for phenomenons. Besides, the effect of the extreme registers is not always pleasing; often forced, even with good performers.

In the usual American scheme of arrangement for band, four B♭ cornet parts are used in the score — solo, first, second and third. The solo cornet, of course, is given the melody, although it is also used, when the occasion presents itself, as an accompanying instrument; for instance, in the case of solos for the baritone or some other instrument, for variations, ornamental purposes, etc.

The first B♭ cornet is used as a melody instrument; in some instances to give relief to the solo cornet by alternating with it, or to strengthen the melody part by causing both cornets to play it. There is still another and special reason for the adoption of a separate part for the first cornet, whose rôle is to play what is commonly termed "second" or "duet" with the solo cornet. As a matter of fact, the intervals known as "seconds" are rarely used in this connection, for in most cases the two cornets are playing in thirds and sixths, the last-named interval being the inversion of the first. It seems hardly necessary to illustrate this point; still, we will give as an example the following extract from "The Marksman March," composed by the author of this booklet, and published by Carl Fischer.



The second and third B♭ cornets are used in various ways. They are accompanying instruments, especially in full passages. They are also used as melody instruments, playing with the other cornets, or with baritone, trombones and even with basses. Often, both play what would be the first cornet part, when this instrument is playing in unison with the solo cornet. But the particular *raison d'être* of these parts in the score is to supply trumpet effects, as here exemplified:



The second and third B♭ cornets always go in pairs; they are inseparable.

The E♭ Cornet. — This instrument, unfortunately, is gradually being classed with the "has-beens." We say *unfortunately*, for the instrument is really useful. It has the same compass as the B♭ cornet, but being pitched a fourth higher, the real compass of the cornet section is thereby extended. It is in purely brass bands, of course, that the E♭ cornet is most desirable; but it is none the less useful in small reed bands. Besides being treated in the same manner as the B♭ cornet in the score, it may be used with more freedom for variations, ornaments, etc., especially in the upper register. Care should, however, be taken that parts for this instrument are not written above F except in isolated instances.

CHAPTER II

THE ALTO

Four altos (all in E♭) are now generally used in a score. The alto is in reality a substitute for the French horn, which instrument is so delicate that it is not well suited for the use of amateurs. The alto is also preferable for street playing.

The altos are now classed as first, second, third and fourth. In the "good old days" the four altos were present, but were called solo, first, second and third. One reason for this classification, given the writer by a music publisher, was that the first alto player was very much flattered by seeing his part marked "solo," while the fourth alto player was less humiliated by having his part marked "third." This is of course not the true reason, but is as good as any at the present time. As a matter of fact, the several different alto parts are of equal importance.

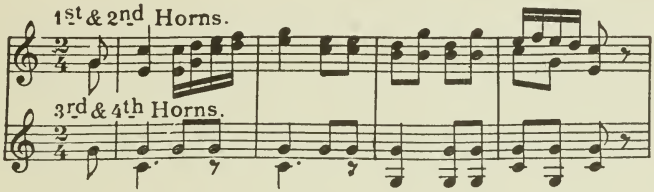
The alto is effective as a melody instrument, but there was an abuse of it in the earlier publications. In many cases the solo alto part was simply a duplication of the part for E♭ cornet. Solos are, and should be, given to the first alto, but only occasionally. The first alto can also be made to play in "duet" with the solo cornet, when the passage is too low to be effectively rendered by the first cornet.

In the band, the altos represent the second violin and the viola of the orchestra, the notes of the chords of the accompaniment being distributed among them. The pitch of the E♭ alto is a fifth lower than that of the B♭ cornet. Its compass, like that of all other three-valved brass instruments, is identical with that of the cornet; but what has already been written regarding the extreme high and low registers of the cornet is applicable with even more force to the alto. For all practical purposes, therefore, the arranger should limit the compass of the altos in the higher register to E, fourth space; and in the lower register to C, first added line below the staff. F and G in the higher register may occasionally be used for special effects, but not otherwise, except in cases of extreme necessity.

As was mentioned in the first part of this work, the more essential notes of the various chords are given to the first and second altos. It often happens that only three notes are in a given chord; in this case,

of course, the fourth alto must duplicate the notes of either the second or third alto (generally the third).

The legitimate function of the altos is to supply the accompaniment; but peculiar and striking effects are sometimes produced with them, for instance, in the hunting chorus from the opera "Der Freischütz," where only horns are used, as follows:



In amateur arrangements of this passage the fourth horn part is usually given to the baritone, on account of its low register.

We shall have occasion to say more about the distribution of chords among the altos when giving examples of practical arranging.

CHAPTER III

THE BARITONE. THE TROMBONE

The *B♭ Baritone* has the same compass as the B♭ cornet, but its sounds are one octave lower. It is the most "pliable" brass instrument in the band, and can be utilized in more different ways than any other. It may be used as a melody instrument, with the cornet, for individual solos or for counter melodies, etc. It is often required to play in unison with the trombones, when the large instruments are given a prominent part. If nothing better offers, the baritone even condescends to play accompaniment or bass parts. Consequently the arranger must realize that this instrument affords many opportunities for the exercise of his ingenuity.

The baritone occupies a similar position in the band to that of the violoncello in the orchestra. Baritone parts are written both in the bass and treble clefs; and for the sake of simplicity and clearness we will confine out present remarks to the treble clef, leaving the bass clef till some future time, when it will receive our attention.

The *B♭ Trombone* has the same pitch and compass as the baritone. In band music, trombone parts are written in both bass and treble clefs. When the part appears in the treble clef, it is customary to call it *tenor*. In the past the tenor, which is really a baritone of small caliber, was in use in American bands; but it has gradually become obsolete in this country, having been replaced by the trombone. By the elimination of the tenor we suffer the loss of a desirable tone-color, but the trombone is so much preferable in small combinations of instruments that its adoption in place of the tenor is in the nature of an improvement.

Three trombones are used in band scores. The first and second trombones play accompaniments, counter melodies, sustained tones, etc. The first trombone is an admirable melody instrument; when so used it is advisable to confine it to individual solos, and not, as in the case of the baritone, to allow it to play with the cornet. An exception to this is when a particularly strong effect is desired; then the first, second and even the third trombone may be given the melody.

The *Third Trombone* is generally used as a bass instrument. When the part for it is written in the treble clef it is usually termed B♭ bass, as the part was formerly played upon an instrument of that name,

which will shortly have our consideration. (What we have previously written regarding the B♭ tenor may also be applied to the B♭ bass.)

The judicious use of the trombones is a delicate matter. With limited instrumentation they offer almost the only means of producing strong contrasts of tone; therefore it is well to silence them occasionally, as their return gives a variety of tone-color, rendering the arrangement less monotonous.

CHAPTER IV

BASSES

The *B♭ Bass* is in reality a baritone of large caliber; it is also called *euphonium*, particularly when used, as it often is, to play baritone parts. Personally, we do not regard it highly as a bass instrument, but are strongly in favor of it as a substitute for the baritone, its tone being deeper, richer and more mellow. One of our pet ideas is the presence of both baritone and euphonium to play the baritone part, which in our estimation results in an admirable blending of two distinctive tone-colors.

The B♭ bass part, like the B♭ tenor part, is now practically considered as a third trombone part, which we think is much better. When it becomes desirable to double the regular bass part in octaves we have at our disposal both the baritone and the third trombone. The part for the B♭ bass is written in the treble clef, and it is customary, always to transpose it in the bass clef, in which form it is invariably termed third trombone in our publications.

The *E♭ Bass.* — To this instrument is entrusted the regular bass part of the arrangement. It represents in the band the double-bass of the orchestra. Its part is always written in the bass clef — but why? We can offer no explanation except an ancient custom. It is the invariable custom to write a bass part at concert pitch for an instrument in E♭. This may not matter so much after all, since all players of this instrument must perforce know what is required of them. They are taught (if they read in the treble clef, which is commonly the case) to subtract three flats from the signature and imagine they are playing in the treble clef. This is an ingenious process, but there are not always flats in the signature to subtract from, and the question of the proper use of sharps, flats and naturals (as accidentals) is the source of much trouble. In our first examples of arranging we will use the current method of writing for the E♭ bass, reserving observations until the bass clef question is taken up in detail.

The compass of the E♭ bass is the same as that of all other three-valve instruments, but the higher register is utterly impracticable and useless to the amateur. It is seldom that we may write the part for this instrument higher than the fourth line of the staff (call it D or F, accord-

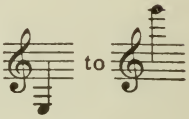
ing to whether you use the treble or bass clef). On the other hand, the lower register is always called into action. On account of the large size of the mouthpiece and the caliber of the instrument, many players find it difficult to produce the extreme lower tones; therefore it has long been the custom to duplicate the low notes by adding others an octave higher, for the convenience of players who experience difficulty in obtaining the low sounds.

The *BB♭ bass* is a fifth lower in pitch than the E♭ bass, and an octave lower than the B♭ bass. This ponderous instrument has a noble and powerful *timbre*, akin to the deep pedal tones of the organ. Its treatment in the score is similar to that of the E♭ bass; and, in fact, the same part is used for both instruments, since it is manifestly impossible for the arranger to know which of the two is to be employed. It is to be regretted that a separate part is not written for the BB♭ bass, for the present system is grossly defective in the sense that it leaves too much discretion to the player in the matter of octaves. For example, if  is found in a part written for E♭ bass, the corresponding note for the BB♭ bass in the treble clef would be  , which is manifestly too high. In such cases the performer always plays an octave lower. It would be much better and safer if a separate part were written, but the arranger must conform to existing conditions, the responsibility resting with the publisher.

CHAPTER V

WOOD-WIND INSTRUMENTS

For the present we shall discuss, in connection with the subject of wood instruments, piccolo and clarinets only, leaving consideration of the oboe, bassoon, etc., for a later section of this work.

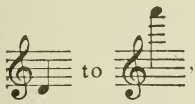
The *B♭ clarinet*, with its great compass, extending from  and even higher, and its extreme flexibility of tone, is the most resourceful instrument in the band. It is the *violin* of the reed band, and may be called upon to play any part in the score. While it is of course the leading melody instrument, it is also an accompaniment instrument of great importance. It is also capable of the most brilliant ornamental figures. In fact, in all departments of the score, excepting perhaps the bass part, we meet with motives suitable for performance by the clarinet.

In American publications we generally find three B♭ clarinet parts, the second and third being printed together as a rule. In concert editions we generally find a solo clarinet part added. The solo and first clarinets are naturally given the leading parts, while the second and third clarinets play the accompaniment, especially if it is in arpeggio form; they also play in thirds or sixths with the first clarinet. It is sometimes found advisable to have all the clarinets playing the melody, either in unison or in octaves.

The sounds in the extreme upper register of the clarinet are shrill and screeching; it is well to write no higher than E  except in marches and in noisy passages, when F and even G are allowable. Many amateur clarinetists, however, are not able to produce these high tones in a satisfactory manner. The lower register possesses a rich *timbre* of a peculiarly pleasing quality, and its lower tones may be freely employed.

The *E♭ clarinet* has the same compass as the B♭ clarinet, but its pitch is a fourth higher. It is treated much in the same way as the B♭ clarinet, but generally appears alone in the score, except in large arrangements, where we often find two E♭ clarinets. The instrument is used to play the higher parts, which the B♭ clarinet could not reach to advan-

tage, if at all. The extreme tones of the E♭ clarinet are still more difficult to produce and to control than those of the B♭ clarinet, and E  is about the practical limit of the upper register. The E♭ clarinet is not, however, strictly confined to the upper register. Its entire compass is available, and a good effect is obtained by causing it to play in unison with the B♭ clarinets.

The D♭ piccolo, sometimes improperly called the *E♭ piccolo*, is the highest in pitch of all the band instruments. Its compass extends from  but only the middle and upper registers can be practically used, as the lower register is too weak to be heard with full band. The character of this instrument renders it suitable only for brilliant work; it is especially adapted for variations, complicated passages being comparatively easy for so facile an instrument. It is mostly used in *tutti* and *forte* passages, although showy ornaments, such as arpeggios and the like, may be effectively rendered in slow, soft passages.

It must be remembered by the arranger that the piccolo really sounds an octave higher than its part is written. This peculiarity must never be lost sight of, and the piccolo should not be compelled to play the melody with the cornet if some of the clarinets at least do not play in octaves with the latter instrument. Otherwise, the gap between the piccolo and the cornet would be unduly noticeable, and the effect unpleasant.

CHAPTER VI

INSTRUMENTS OF PERCUSSION

This subject requires very little space, and accordingly this will be a very short chapter. The instruments which come under this head are the *snare* and *bass drums*, *cymbals*, *triangle*, *bells*, etc. As every one knows that a drum is a drum, and is acquainted with its effect, it is unnecessary to devote much space to it or its accessories. We may, however, caution the young arranger against too great a use of the drums in concert music. In marches the drums may be kept going nearly all the time; in fact, this is almost a necessity. But in other styles of music they should be held in reserve for special effects.

The *Tympani*, or *Kettledrums*, are drums producing sounds of positive pitch. They are usually found in pairs, one being tuned to the tonic and the other to the dominant; but in exceptional instances this tuning may be departed from. The modern tympani player is often equipped with three instruments instead of two, thereby avoiding numerous and sometimes difficult changes of pitch. Tympani are used only in large scores, such as the beginner is unlikely to attempt; therefore we will not go into further details concerning them.

To complete the list of instruments found in this department we may mention the *tambourine*, *castanets*, *bird-whistle* and other whistles, rooster-crow, hen-cackle, etc., etc., all of which articles come under the general name of "drummers' traps."

PART III

TRANSPOSITION

We have seen that several qualifications are required of the arranger. On some points (harmony, for instance) it is not absolutely necessary that he should be a master of the science; but as regards transposition, he must be fully acquainted with the subject. He must even be an expert! But the student need not be discouraged, for ordinary intelligence and some labor are all that is required of him.

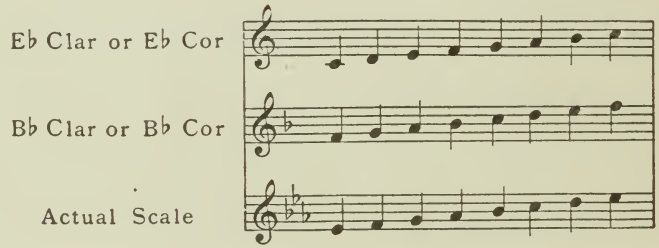
CHAPTER I

THE REAL PITCH OF THE BAND INSTRUMENTS

We have, up to the present time, spoken of the B♭ cornet, the E♭ alto, etc., without explaining why they are so designated. The instruments which we have so far considered are termed "transposing instruments"; that is, the notes of their scale are different from those of the actual scale. An instrument is said to be in any certain key when its C corresponds to some particular note of the actual scale. For instance, if C is sounded on a B♭ cornet, it will be found that the corresponding note on the piano, if its pitch be correct, is B♭. We may therefore say that the cornet is in B♭, and so on for the other instruments. In the band, the transposing instruments are in E♭ and B♭, except the piccolo, which is in D♭.

In looking over a band piece we notice that at least four different signatures are used. Supposing that the B♭ instruments are in C, we find that the E♭ instruments are in G, the D♭ piccolo in A, while the instruments in the bass clef (about which more anon) are in B♭, which is the actual key of the piece. All this may appear confusing to the tyro, but some explanations may tend to make the matter clearer.

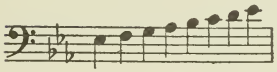
The B♭ instruments being *one tone lower* than the actual key, it is plain that, if we wish to produce the correct sound represented by any note, we must play *one tone higher*. Likewise, the E♭ instrument being a minor third (or one and one-half tones) higher, we must consequently play a minor third lower. The following example illustrates the relation between the instruments in B♭, E♭ and the actual scale.



It will be seen that there is an interval of a fourth between the E♭ and the B♭ instruments. The reason for this is that as the pitch of

the E♭ clarinet is a fourth higher than that of the B♭, its part must be written a fourth lower.

The above example may also be used to illustrate the positions of the E♭ alto and the B♭ baritone; but as these instruments sound an octave below the clarinets and cornets, the actual sounds must be represented an octave lower, in the bass clef:

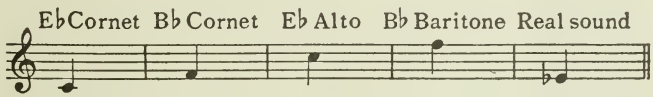


We have been alluding to minor thirds, fourths and other intervals, and we trust that the student understands; but if he does not, it proves that he has forgotten our remarks in Part I. It will be a simple matter for him to go back and review this part.

After this digression we return to our former subject. The arranger must realize the exact position of any note which he may write for some particular instrument; otherwise he may become confused, and make serious mistakes.

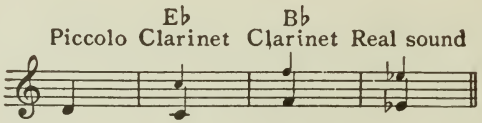
For instance, when he writes F  for the B♭ cornet, he must know what note would represent the same sound on any of the other instruments. For the baritone or trombone, which are pitched an octave lower than the cornet, he must write an octave higher  if he wishes the same sound produced. For the E♭ cornet, which is a fourth higher in pitch than the B♭ cornet, he must write a fourth lower,  For the E♭ alto, two ways of reasoning are open to the arranger; first, the alto being an octave lower than the E♭ cornet, he writes it an octave higher,  Or, if he cares to put it that way, the alto being a fifth lower than the B♭ cornet, he writes it a fifth higher, producing the same result.

We sum up the above in the following example, giving in addition the real sound:



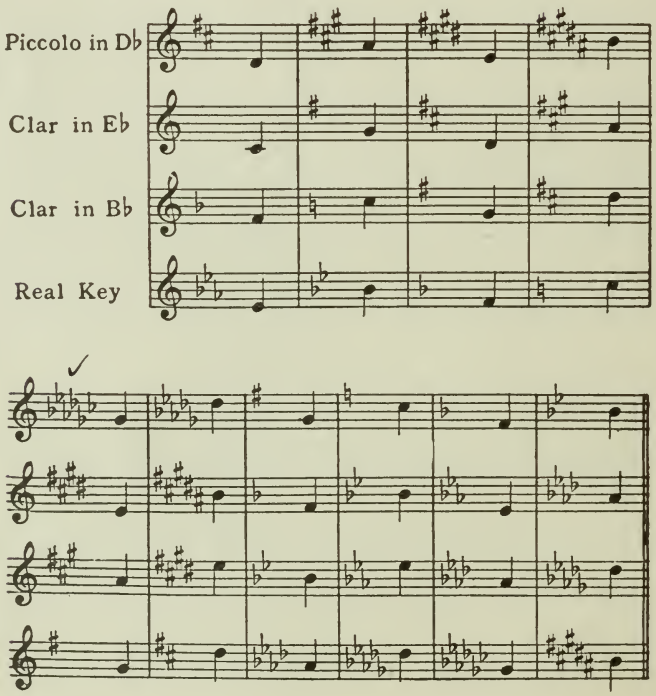
The student may draw analogies from the above explanations and example, and thus ascertain where to write any given note in order that it may have its proper place in the various parts. This knowledge is required of the arranger, that he may be able to distribute intelligently the various notes of a chord, avoid confusing octaves with unisons, etc. In short, it enables him to know exactly what he is doing.

The D♭ piccolo, being the only representative of its class or key, must be taken up separately. The process is the same as for the other instruments; the piccolo being pitched a minor second (one half-tone) above actual pitch, its part must be written a minor second lower. It being a major second (one tone) lower than the E♭ instruments, its part must be written a major second higher than theirs. Also, as it is a minor third higher than the B♭ instruments, its part must be written a minor third lower. We recapitulate in this example:



The small notes are there for the reason that the piccolo actually sounds an octave higher than its part is written.

We append a general table of all practical keys, showing their relation and signatures. The four notes in each of the perpendicular divisions all represent the same sound, with the single exception that the piccolo sounds an octave higher.



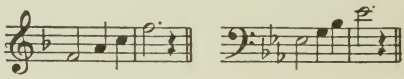
It will be seen that the B♭ instruments have one flat more and one sharp less in their signature than the E♭ instruments. On the other hand, the E♭ instruments have one sharp more and one flat less than the B♭ instruments. This observation may be of some use to the student.

CHAPTER II

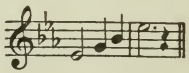
THE BASS CLEF AND ITS RELATION TO THE TREBLE CLEF

We have already expressed our disapproval of the use of the bass clef for the larger brass instruments. We consider it confusing, and its use unjustified. We might advance a host of reasons in favor of this opinion, but we recognize that we are not able to effect a revolution, and must therefore bow to the existing conditions, accepting them as gracefully as we can. So must the student.

When the B♭ baritone and other instruments of the same pitch are playing from the treble clef, their part sounds an octave lower than it is written. When they play from the bass clef the part is in the true key and octave, but the players are transposing. This does not matter much to the players themselves, for they were taught in that manner, and some of them would be much surprised to learn that they were really transposing. But to the arranger the situation is more complex; he must understand both clefs and their relation to each other. Here is a passage for an instrument in B♭, written in both clefs:



Teaching the clefs to a player is not quite the same thing as explaining the subject to an aspiring arranger. The player is told what fingering to employ, but it is not imperative that he should know the reason for it. In regard to the above examples, the player is taught to produce the sounds represented by each of the notes in the two clefs with the same fingering and intonation. To the arranger the explanation must be that the part in the bass clef must be written one degree lower than the part in the treble clef, because the real pitch of the baritone is one degree below its scale. According to this it might be implied that the part should be written as follows:



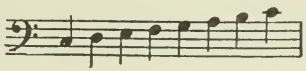
But this only gives the proper notes, not the proper octave. We must reiterate that the baritone part sounds, when read from the treble clef,

one octave lower, which necessitates the transposition of the proper notes an octave lower in the bass clef in order that the pitch may be correct.

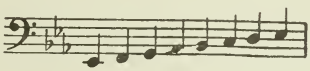
We are endeavoring to explain this somewhat complicated subject in the simplest manner; but to do this in a comparatively thorough way we must perhaps introduce more theory than the learner would wish. We ask him to let us have our way for a little while longer, promising to shortly consider the subject in a more practical, if empiric way. However, whatever theory he can grasp at the present time will do him no harm.

Parts for the E♭ bass are, as a rule, written in the bass clef; the E♭ bass player is taught to consider the notes of the bass clef as if they were written in the treble. To him the note in the third space is always C, no matter what the clef may be. He is further taught to take three flats from the signature. (Vide below, Transposing the clefs.) Then, all is plain sailing for him, with perhaps the exception of some troubles caused by accidental alteration. (We are of course alluding to amateur players, who are more familiar with the treble clef.)

The arranger must possess a more solid and practical knowledge of the subject. He must reason that as the scale of the E♭ bass is a minor third above the real scale, its part must be written a minor third below it in order that the correct sounds may be produced. In French publications for band this transposed part is written in the bass clef, but in the proper scale of the instrument. The scale of C is written thus:



In this country we use the actual key, so that the scale of C for E♭ bass is written in E♭:



According to this system the transposition of a third lower is made automatically; for we consider the notes in the bass clef, as here written, as being in the treble clef. The French way is not much preferable, although the difficulties connected with the use of accidentals are avoided. That question of accidentals is the innocent cause of much trouble. Sometimes a natural is a natural; a statement that we trust will not often be contradicted. But sometimes, again, a natural must be taken as a sharp by the player who reads in the bass clef. To the theorist it is a very simple thing to admit that a natural, when it raises

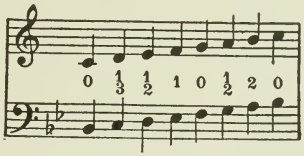
the pitch of any note a semitone, or half-tone, is the same as a sharp, which does the very same thing; but the amateur player and the amateur arranger are apt to be puzzled.

We shall have occasion, later, to return to this subject, which we will now leave for a while. In the meantime, we will give some processes by which parts may be transposed from one clef to the other

CHAPTER III

TRANSPOSING THE CLEFS

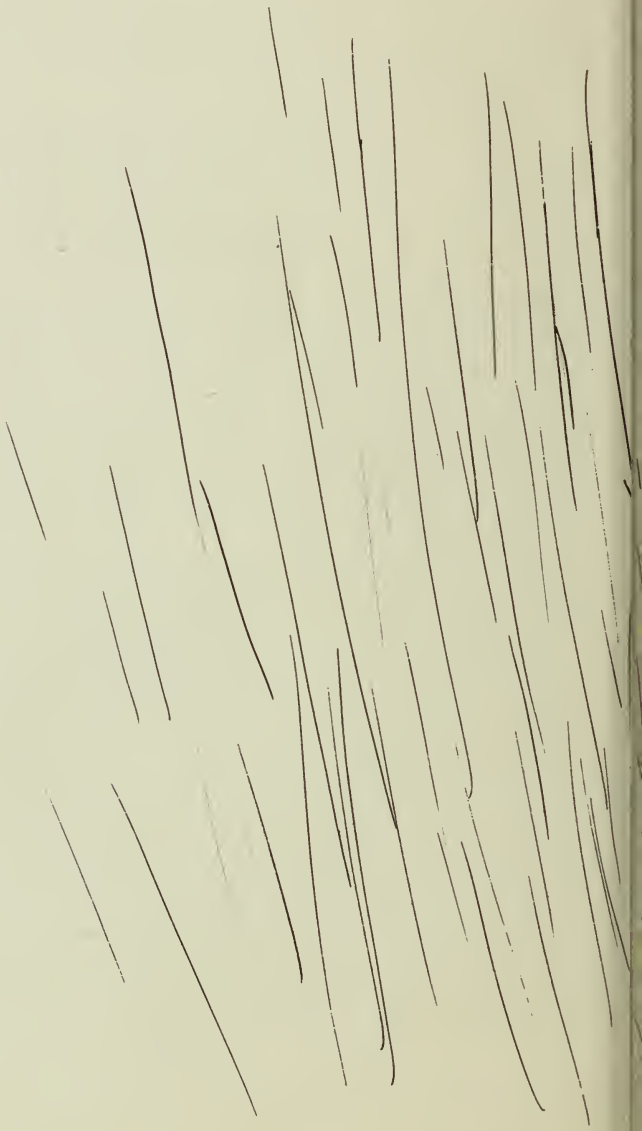
We have thus far tried to explain the relations of the two clefs in a clear and plain manner. In case our explanations have not been sufficient, however, we will now proceed more by example than by precept. Here is the scale of C for the B♭ baritone in the treble clef, and the corresponding scale of B♭ in the bass clef:

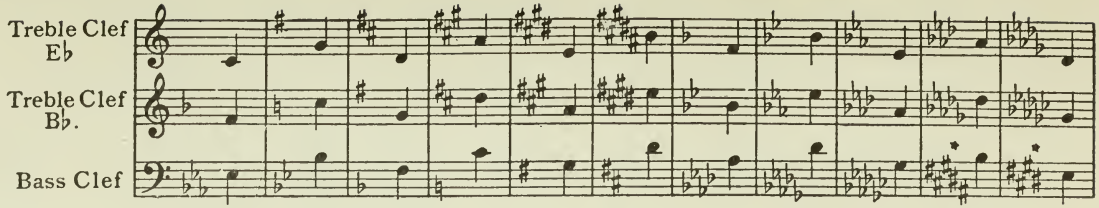


The student should by this time understand the relation of the two clefs; still, he may wish to know of some practical way of transposing parts. He should observe that, in the preceding example, the notes in the treble clef are five degrees lower on the staff than those in the bass clef. Therefore, if he wishes to transpose a bass-clef part into a treble-clef part, he simply writes the notes five degrees lower; and to reverse the process, and transpose a treble-clef part to the bass clef, he writes it five degrees higher.

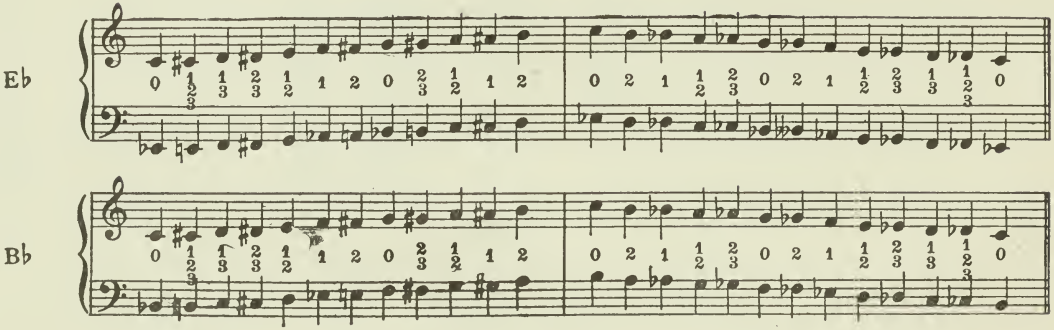
This will give him the proper notes, but without a signature. To obtain this he must subtract two flats from the signature of the bass clef when transposing a treble-clef part from it, or must add two flats to the signature of the treble clef when transposing a bass-clef part from that. (All those rules apply exclusively to instruments in B♭.) We have just stated that it is necessary to take two flats from the signature of the bass clef in order to have the proper signature of the treble clef; but how is it when there is only one flat in the signature of the bass part? Simple enough: — Take off that one flat and add one sharp to make up for the absence of another flat; in the absence of any flat at all, write two sharps. If the signature of the bass-clef part is one sharp, write the signature of the treble-clef as three sharps. This system is ingenious, and this way of proceeding should enable the learner to transpose parts with ease, although it is better to reason out the process according to theoretical principles.

But we have yet to deal with the question of accidentals in the bass clef. To thoroughly explain this would involve much consideration of scale construction — a subject which we will touch upon when taking up transposition in general. In order not to tire the student, we deem it better to present for his inspection a table showing the relation of the different keys in the two clefs, also showing the relation of flats, sharps and naturals. This table is followed by the two corresponding chromatic scales, with fingering marked for E♭ and B♭ instruments. The study of these examples will be of benefit to the student; they may also be used for future reference.





* Note. — The keys of B and E are not practical in the bass clef for valve instruments. The custom is to have seven flats in the signature, and mark with double flats the intervals needing alteration.



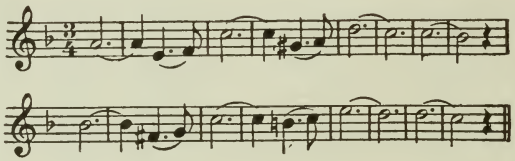
CHAPTER IV

TRANSPOSITION IN GENERAL

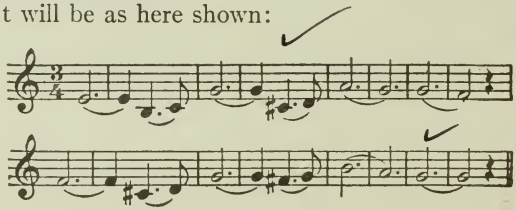
Transposition is not, after all, such a terrible task as one may at first think. It certainly requires much exercise of the reasoning powers in the beginning. The learner must always think of the distance from the given note to the one he is seeking; he may be obliged to count that difference for nearly every note he writes, but he has to take such pains at the beginning only; after a while he becomes more and more familiar with the process, which gradually loses its difficulties. To the practiced writer, transposition becomes nearly a mere mechanical process, not requiring special mental effort.

We will suppose a part in C which we wish to transpose to A. This key being a third lower, we must of course write the new part three degrees lower. Transposition, it will be seen, is mainly a matter of calculation.

We take as an example the first sixteen measures of "Fleurs Sauvages Waltz," published for band and orchestra by Carl Fischer, in amateur editions:



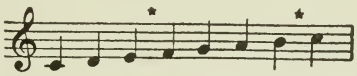
The above is the B♭ cornet part. In order to write this part for the E♭ cornet, which as we are aware is a fourth higher in pitch than the B♭ cornet, we must write it a fourth lower. The example is in the key of F; consequently, the E♭ cornet part will be in C, a fourth lower. The learner will then proceed to write the passage four intervals lower, and the result will be as here shown:



Had we taken this last example, to write a B♭ cornet part from it, the process would have been reversed; the pitch of the B♭ cornet being a fourth lower than that of the E♭, the part would have been written a fourth higher.

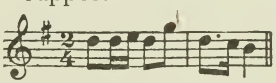
This is not very complicated, and will be easily grasped by the student. However, if he is observant he will not fail to notice that B♮ in the twelfth measure of the B♭ cornet part appears as F♯ in the E♭ cornet part, and will naturally ask why the natural has been exchanged for a sharp. An explanation of this entails some consideration of scale construction, which the student will find treated in any music primer; notwithstanding which, we will give it some attention.

The distance from one sound of the scale to the next is not always the same. At two points in the scale the distance is a semitone instead of a whole tone. In the diatonic scale the intervals between the third and fourth and the seventh and eighth degrees are each but a semitone. In the scale of C these semitones are between E and F and B and C:

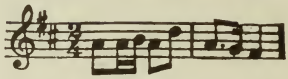


All other scales are, naturally, constructed in the same manner.

When the regular order of the scale-degrees is altered, sharps, flats and naturals are employed. In the first version of the melodic example given in this chapter the pitch of the B in the twelfth measure is raised a semitone by a natural. In the transposition, B is expressed by F, the fourth degree of the scale of C. A natural would have no effect on the note, since it already represents the sound of F natural; therefore a sharp is added, to raise the pitch of that note a half-tone. When meeting with accidentals the student must carefully consider how they are to be translated. It is in transposing from one clef to another that he must be on special guard against mistakes.

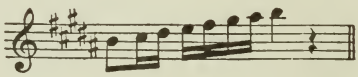
The knowledge of scale construction enables us to transpose by another and more legitimate process than that which we have thus far employed. It is to take into account the position of the notes in the two respective scales — that from which we are writing and that in the key in which the new part is to stand. Suppose we have to transpose a part written in G to the key of D,  By the system we have been using, we would count, and also write, four intervals lower. We would say, considering the first note to be transposed, "The fourth note below D being A, we shall write that note." Reasoning from the position of the notes in the scale we

would have said, "D being the fifth note in the scale of G, we must write A, which is the fifth note in the scale of D,"

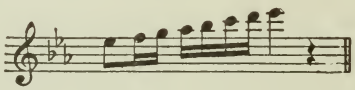


This is a quicker process, and at the same time more correct, theoretically. Intimate acquaintance with scales in every key enables one to transpose with as much rapidity as mere copying. To acquire this faculty, the student should train himself to call the notes by their position in the scale, and not by their position on the staff. He may begin by impressing upon his memory the first, third and fifth notes of the scale in different keys. These notes, which constitute the chord of the tonic, are easy to recognize in any key; and when he can do this, practice will speedily enable him to recognize the other notes.

Some transpositions are termed *enharmonic*, by which is meant that two sounds may be alike yet have a different notation; for example, D♯ and E♭:



To transpose this a third higher would bring us to the key of D♯, a key that is practically nonexistent. The process which we have thus far used must be modified; we can no longer merely write a third higher, but must call D♯ by its other sound-name, E♭, and write thus:



So that in this case it is a transposition of a diminished *fourth* instead of a *third*.

We will bring Part III to a close by telling the student in three words how to become an expert in transposition. These three words are: Practice, *Practice*, PRACTICE!

PART IV

ARRANGING

The student has long been waiting, doubtless with impatience, for us to take up this subject. We were all the time sorry to keep him waiting, but we could go no faster. Now that we have actually reached the subject, we may say that we have also reached the easiest part of our task. All the drudgery, or most of it, at least, is done away with — provided, of course, that benefit has arisen from the study of the three preceding parts.

CHAPTER I

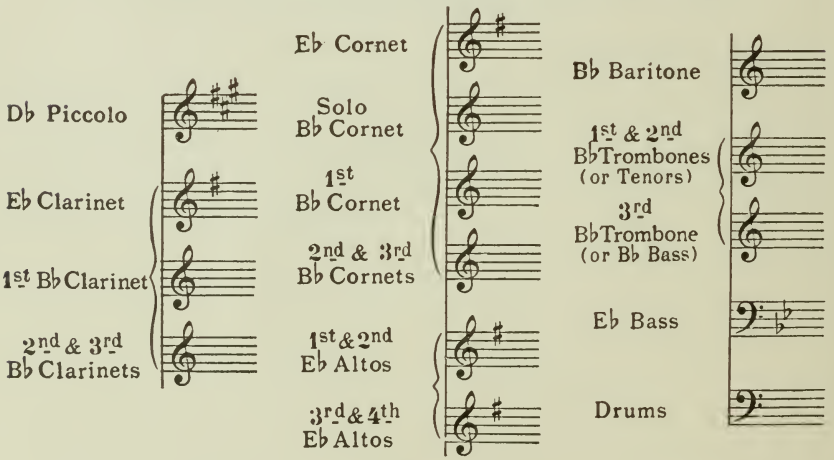
THE SCORE

To arrange for the several instruments we write the parts, one under another, on a page of music-paper, one page making one line of the piece. This constitutes what is termed the *score*.

Several different ways of grouping the instruments in a score are in use. Some writers recommend having the wood instruments at the top, while others prefer to have the brass instruments there. Some will place the drums in the middle of the score, while others will place them at the bottom, or even at the top. After all, this is entirely immaterial. Some particular disposition may be preferable for the conductor, who has to read the score quickly; but the matter is of secondary importance to the arranger.

Still, some plan must be adopted. The writer began arranging when only a boy, not having studied instrumentation or even seen a score. He instinctively placed the wood instruments at the top of the page, according to their pitch, then the brass instruments in the same manner, and lastly the drums on the bottom line, and has followed this plan ever since.

This is the appearance of one of our scores for small reed band:



It will be noticed that some of the instruments are doubled on a line; this is not alone for convenience, but also to conform to the custom so

prevalent in America of having the parts for two instruments written and printed together. Our score thus consists of fifteen lines. Score-paper generally having twenty lines, we thus have five lines available for alterations and corrections. In large scores we use an *addenda* or auxiliary score, to carry the additional instruments, score-paper seldom having more than twenty staves; or if it has, the lines are too close for accurate and easy writing.

It will be noted that we use only the treble clef for baritone and trombones. This clef is used because, few leger lines being required, it requires less space than the bass clef. It is unnecessary to have the parts in both clefs in the score, as the missing parts can readily be supplied when copying the separate parts.

We have said that the relative positions of the instruments in a score are unimportant. What is far more important is to know how to proceed in writing a score. It is not to be supposed that the arranger starts work on the first line, writes the piccolo part, then takes up the E♭ clarinet, and so on, to the last line. As a matter of fact, he writes some measures of some particular part, no matter where situated, then takes up another part, and goes on in this manner, which is not haphazard, but is inspired by the exigencies of the moment.

The amateur is advised to follow some fixed plan in his first attempts. He may first write the solo cornet or melody part, perhaps four or eight measures (that is, a period or a phrase) at a time. Then he writes out the bass part, and after that the accompaniment parts — altos and trombones, if the latter are so employed. Thus he has before him the melody and the accompaniment, set forth in a clear and complete manner. This makes easier and safer the writing of the baritone part, which may perhaps contain some figures which must conform with the harmony of the accompaniment. Then he may write for the trombones, if they have not been employed as accompanying instruments. He completes the brass section by writing the parts for the first, second and third cornets, also for E♭ cornet.

After this he writes the melody parts in the wood section. He may wait until the last to write the second and third clarinet part, deriving inspiration for it from some other part. For instance, the solo and first cornets are playing in thirds, and it may strike the arranger's fancy to duplicate the effect an octave higher with the clarinets. This he may do for any instrument or group of instruments, an effect in one part suggesting another in some other part. In this, more depends on the taste and inventive genius of the arranger than on any rules or processes which might be laid down or explained.

Many abbreviations are used in scores; many more than are allow-

able in manuscript which is to be played from. Besides the ever-ready repeat sign  we can shorten the labor of scoring in many ways. For instance, when both solo and first cornets are playing the melody, it is not necessary to write it for the latter; all that need to be done is to write "col solo cornet," which means: to follow that instrument. If the first clarinet is to have the melody in octaves with the cornet, we simply write "col solo cornet *8va*," and so on.

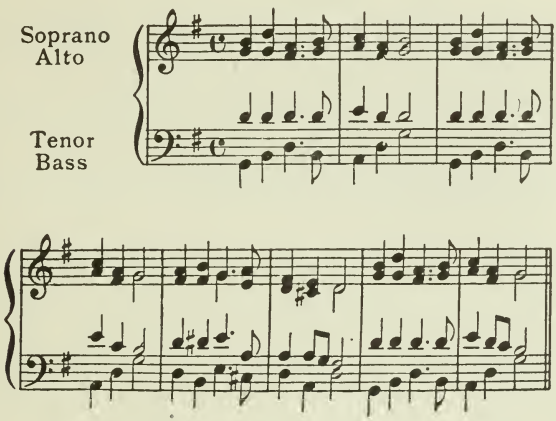
Sometimes a certain phrase appears twice in the course of a piece of music. In such a case it is unnecessary to write it the second time; we can number the measures from 1 to 8, or to as many as there happen to be, in the first instance; then, when these same measures occur again, simply write at the beginning, "Measures 1 to 8," which of course is copied out again when the separate parts are written. A strain or other portion of a piece may also appear twice. In such a case we put the letter A at the beginning, and the letter B at the end of the strain or other portion; when it should appear for the second time we simply write "From A to B" and save a lot of unnecessary writing.

This is about all we need say regarding the mechanical part of the subject. We have now reached a point where the student must do more than merely receive information. He must exercise his taste, ingenuity and inventive faculties. We cannot have precepts to fit all occasions, yet we shall go on imparting more information to the best of our ability.

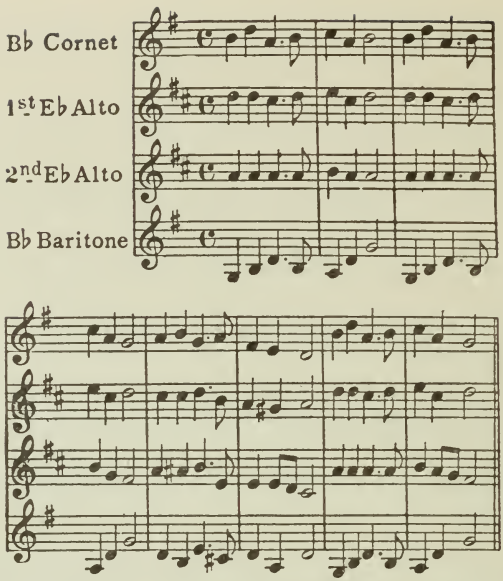
CHAPTER II

FIRST EXERCISES IN ARRANGING

We think it wise to make the first attempt with a small combination of instruments. A quartet of brass instruments seems well adapted for the purpose. We take a hymn for the first example, as being the easiest and simplest to start with — Pleyel's Hymn, arranged for four mixed voices:



We will arrange this for a quartet consisting of B♭ cornet, first and second E♭ altos and B♭ baritone. The original key being suited to the several instruments, we shall retain it. All we have to do, then, is to distribute the notes of the several voices among the instruments, which should be an easy matter after the detailed explanations given in previous chapters. The first (or soprano) part goes to the cornet, unaltered. The second (or alto) and the third (or tenor) parts are allotted to the altos. This implies a transposition of a fifth, to the key of D. The fourth (or bass) part is given to the baritone as it is, but transposed in the treble clef. If the work has been properly done, the result will be as follows:



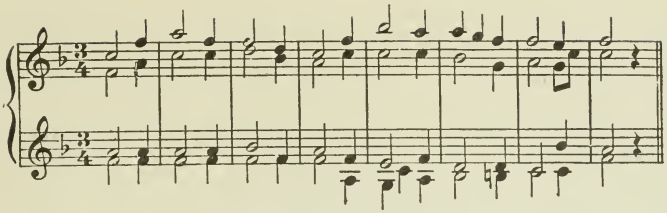
The baritone part is rather too low to be practical, but we leave it thus in order strictly to translate the vocal bass part.

The student is advised to take another such piece from some hymn-book, and make experiments with it along the above lines. If he fails, it will show that he has failed to understand or to memorize Part III of this work, and must review it carefully. No other remedy can be offered for such a case.

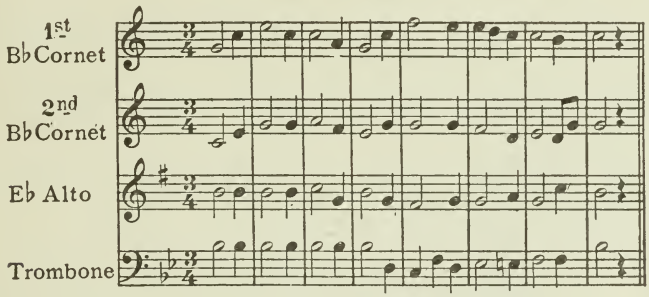
We will now take up another four-part piece and arrange it for brass quartet. In our last example we had no difficulty in selecting a suitable key for the arrangement, as we accepted the original key. This key problem is a serious one for the arranger; he must take into account the fact that some key which would suit a certain class of instruments will not suit another class, also that the opening of a piece may suggest a certain key as being acceptable, when lo! he discovers later on, that this key is an impossible one, from modulation or other causes. Therefore he must start again and try to strike a happy medium.

In our next example the choice of a key will not present great difficulties; but we take this occasion to suggest to the aspirant arranger the importance of the subject. Everything depends on himself in this matter, since no definite method of procedure can be shown him, by reason of the different aspects of various cases.

Our next experiment will be made with the last part of "The Soldier's Farewell," arranged for four violins. This is taken from Carl Fischer's "Album of Four-part Violin Playing."



We will give these violin parts to a brass quartet consisting of two cornets, alto and trombone, the latter in the bass clef. This example, as it stands, is too high for our instruments. After some consideration we find that the key of C, a fourth lower, for the cornet would be suitable. We do not consider it necessary, again to explain the process in detail, as the student should now be in a position to act independently; but this is how our brass quartet should appear:



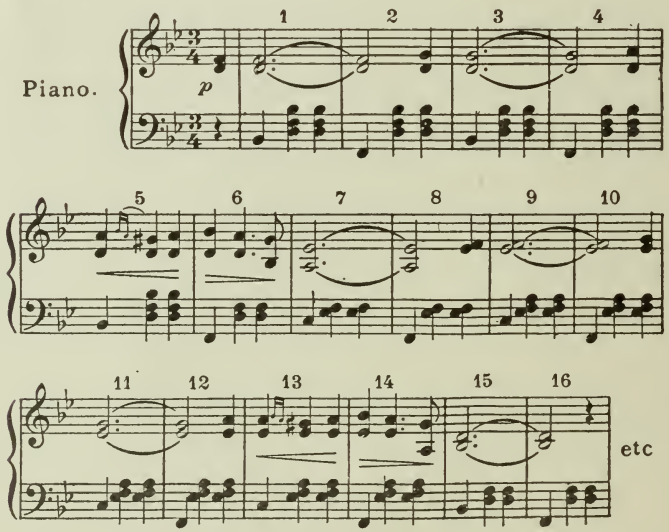
We advise the student to continue arranging for brass quartet for some time; he can find material in plenty for his experiments. The limited instrumentation renders it easier for him to reason out the process he must employ, and the experience thus acquired will serve him when considering more complicated problems.

CHAPTER III

ARRANGING FROM PIANO SOLO

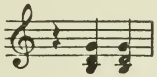
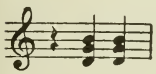
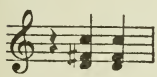
Arranging piano music for band is what the amateur is most likely to undertake when making his first attempts at arranging for practical purposes. He may meet with some piano music, not published for band, that he would like to have in this form also. It may be, too, that he has composed some little things which he has first played on the piano, and which he would like to try with band. It is probably some such desire that has led him to think of studying arranging; but no matter what the reason may have been, he will then have occasion to arrange from piano copy. And if the piece the student has in mind is not already arranged for piano, our advice is to put it in that form at first, as the piano score will give him a clear and comprehensive view of the entire composition.

We here present some measures from the author's "Prés Fleuris Waltz," published for band and orchestra by Carl Fischer:



We will proceed to arrange it for band. The first thing is to consider the key; the present key, B♭, might be chosen, as it lies well within the

compass of the cornet, yet we prefer to write a tone higher, which is also quite within the cornet compass, but will sound more brilliant. It would also be preferable for the altos, the notes available for the accompaniment being in a better position in the register of those instruments. Having, therefore, adopted the key of C for the cornet, of course all the other B♭ instruments will be in C, the E♭ instruments in G, the piccolo in A and the bass in B♭, which shows that the original key still stands as the actual key.

We begin by writing the melody for the solo cornet; then the bass part, as we have recommended in the first chapter of Part IV. Next, we distribute the accompaniment (after-beats) to the altos. By strictly following the piano arrangement, the accompaniment would be in this position  for the altos, which is too low. Therefore we make an inversion of the chords, in this way:  The arranger has frequent occasion to make such alterations. The more important notes of this chord, which we give to the first and second altos, to insure a full accompaniment when less than four altos are present in the band, are the third and the fifth, B and D. The chord would sound full with only these two altos, on account of the tonic being heard in the bass. We give the remaining note, G, to the third alto, and employ the fourth alto in doubling the second, there being but three notes in the chord. At the seventh measure there is a change in the harmony, and the chord for the altos is  This chord, to be complete, should have A added to it; but it is omitted here to avoid octaves with the bass, A being the bass note. At measures 6–7–8 and 14–15–16 the piano has not full chords in the accompaniment. This is on account of the treble part being so low that it invades the register of the accompaniment. In such cases the arranger must supply the missing notes.

We now have before us the melody and the full accompaniment. Looking over the piano part for inspiration, our attention is attracted by the lower notes in the melody, and we feel that they would be effective for first cornet. (The student is advised to refer to the band score, our next example, in order to follow our reasoning more readily on the different points.)

Taking up the baritone, we decide to give it the same part as the first cornet, writing an octave higher, which brings the two parts in unison. Measures 7 and 8 of the piano copy we find filled by a sustained note, causing what might be called a break in the movement of the melody. We feel that it would be in order to place some figure or other here,

and therefore decide to have the baritone play chords in arpeggios in these two measures.

The trombones do not seem to be called upon to do anything in particular here, so we use them in the accompaniment. The third trombone is given the bass part; we write the low notes in octaves, for the convenience of players who might find them difficult of intonation.

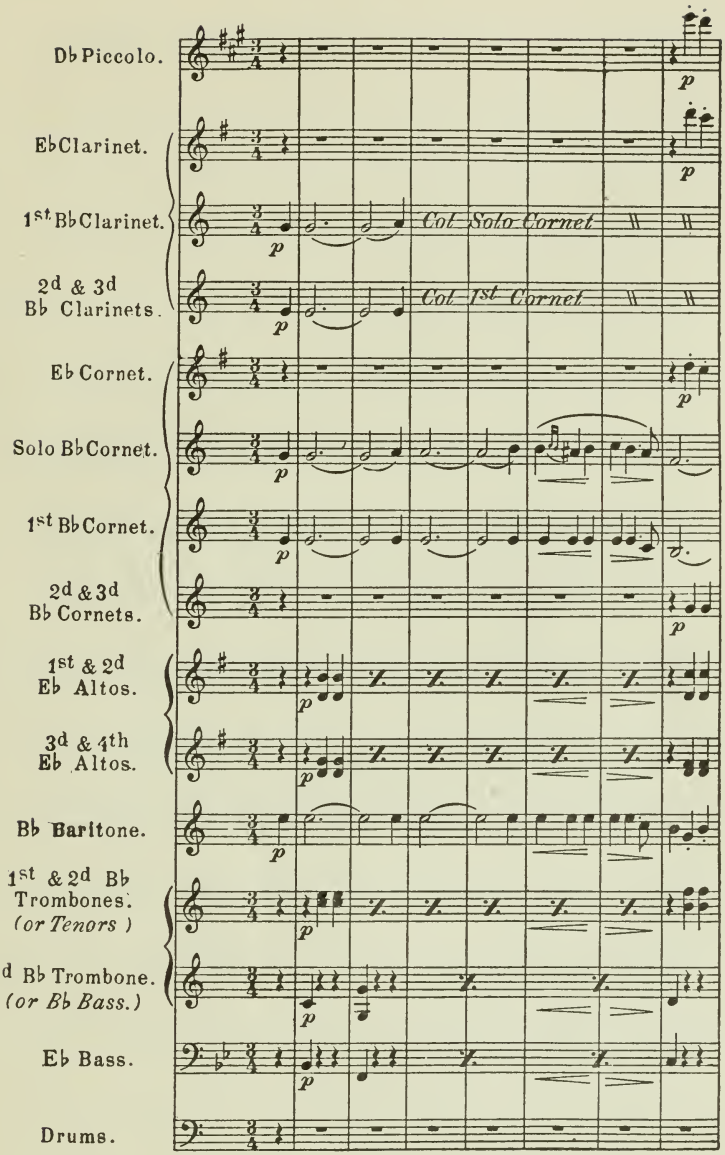
Now, as to the second and third cornets. For these, also, nothing in particular seems to be appropriate, neither would they be of much assistance in the accompaniment, since enough instruments are already employed for it. So we silence these cornets for the first six measures, after which we allot them a few notes producing a trumpet effect. This may seem of slight account to the beginner, but it is by attention to such little details that we produce contrasts and variety in arrangements. The melody is too low in the register to suit the E♭ cornet; we silence it also until the seventh and eighth measures, when we write a little figure for it.

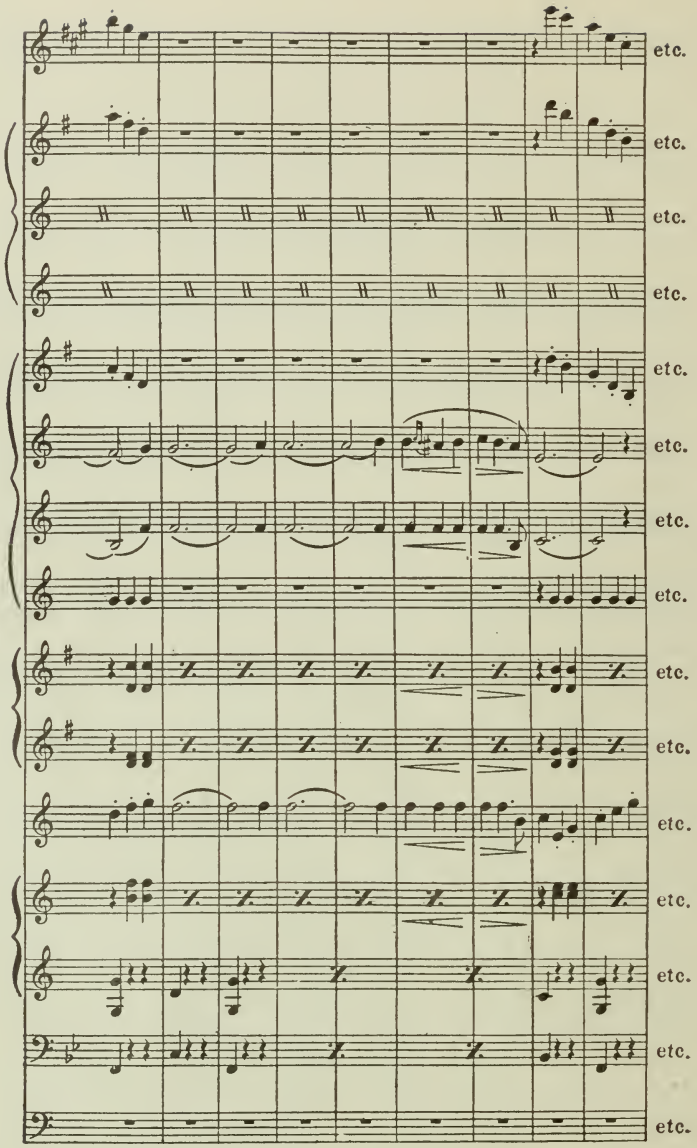
Our brass section being now complete, we turn our attention to the wood section. We might write the melody for the clarinet an octave above the cornet; this would be perfectly in order, but after consideration the quiet, *cantabile* character of the melody induces us to leave it in the middle register. Therefore, we have the first clarinet in unison with the solo cornet, and both the second and third clarinets playing with the first cornet.

To preserve the subdued character of the arrangement we silence both the piccolo and the E♭ clarinet at first; but in the seventh and eighth measures, for the same reason that prompted us to give a certain figure to the baritone, we make these instruments play arpeggios, but in contrary motion to the baritone, as it would not do to have such widely separated instruments play in similar motion. Only the drums are now left, and we will deal with them in a summary way by simply silencing them, as their presence is undesirable.

The reserve we exercise in regard to some instruments, by keeping them silent, is calculated to permit us to produce certain effects by their return. Allowing every instrument to play continually would deprive us of all means of offering or obtaining variety in our arrangements. Conditions are somewhat different in the case of marches; a full effect being then almost constantly desired, all the instruments are generally kept in use.

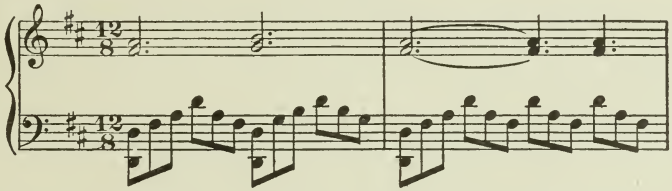
Here is the result of our considerations and observations:


D♭ Piccolo.
E♭ Clarinet.
1st B♭ Clarinet.
Col Solo Cornet
2d & 3d B♭ Clarinets.
Col 1st Cornet
E♭ Cornet.
Solo B♭ Cornet.
1st B♭ Cornet.
2d & 3d B♭ Cornets.
1st & 2d E♭ Altos.
3d & 4th E♭ Altos.
B♭ Baritone.
1st & 2d B♭ Trombones. (or Tenors)
3d B♭ Trombone. (or B♭ Bass.)
E♭ Bass.
Drums.


etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.

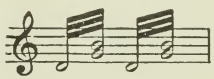
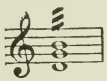
In reality, we have not given definite instructions to the student in arranging this band score; we have merely exposed the inner workings of our mind when engaged in a similar task. Other arrangers, in dealing with this exercise, would certainly come to different conclusions, and the result might be as good as, if not better than, that which we have attained. It is really a matter of individuality, no two minds viewing the same conditions in exactly the same light. We have tried to show the student how to *think* about the subject. He must realize that, apart from acquired knowledge, he must possess some natural taste and aptitude to make effective arrangements. But taste can be cultivated, and aptitude developed; with practice, therefore, he can fit himself to do satisfactory work.

Before leaving the subject of arranging from the piano, we will consider some forms of accompaniment which require modification in order to be practicable for band arrrangement.



This accompaniment in arpeggios could be played by clarinets, but not readily by brass instruments; to adapt it for them it should be put in full chords, like this:

Sometimes the altos and the baritone can be made to play arpeggios in slow movements, when the range and the fingering to be employed render it possible. Even the trombones may play arpeggios in strong passages, when conditions are favorable; but as a rule, arpeggios are not practical for brass instruments.

Tremolos may also be considered here. Broken  tremolos are often playable by clarinets, but the violin tremolo (reiterated notes)  is impossible, and should be made a broken tremolo or else a sustained chord. To be sure, such tremolos are written for the clarinet in some arrangements, but we do not understand how they can be properly played. The writer never employs them, and contends that tremolos of either kind should be changed into sustained chords for brass instruments.

CHAPTER IV

ARRANGING FROM ORCHESTRA SCORE

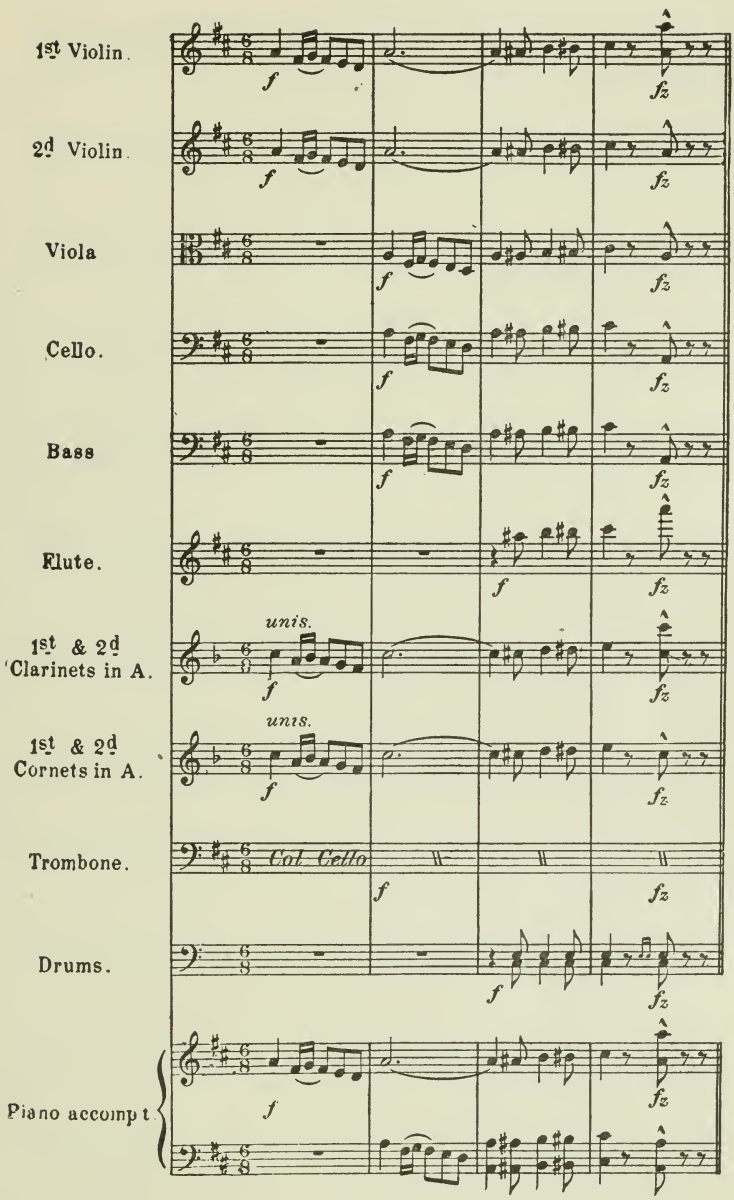
Very few, if any, musical works of importance have yet been composed especially for band, composers expressing their musical ideas through the medium of the orchestra. But we have, in our band repertoire, transcriptions of most of the great musical creations, either in whole or in part. The problem to be solved by the band arranger is to produce, as approximately as possible, the same effects through the employment of different means. The exact tone-color cannot be reproduced, but the contrasts, varied effects and general aspect of the orchestra arrangement can be presented by the skilled band arranger in such a way that the general character of the original will be preserved.

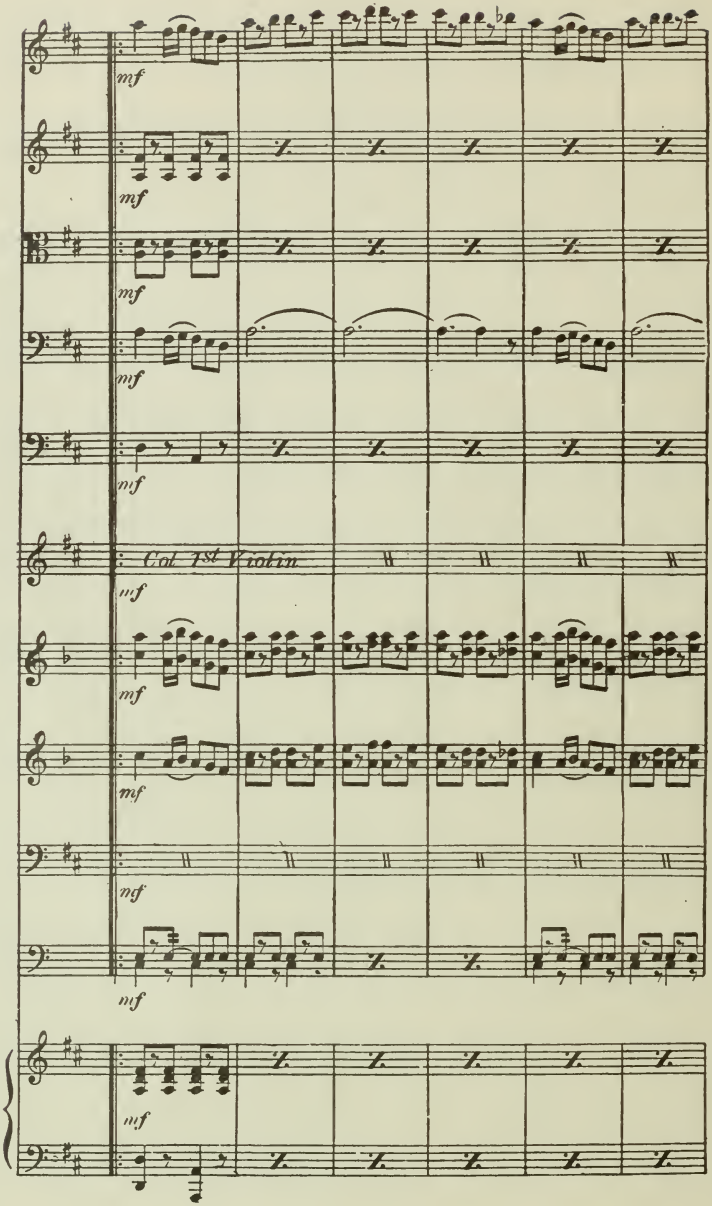
The amateur arranger is not expected to attempt the transcription of masterpieces; he will confine himself, properly enough, to works of a more modest caliber. We offer him, as an example of how to proceed, the small orchestra score of a part of the writer's march, "A Jolly Good Fellow," published by Carl Fischer.

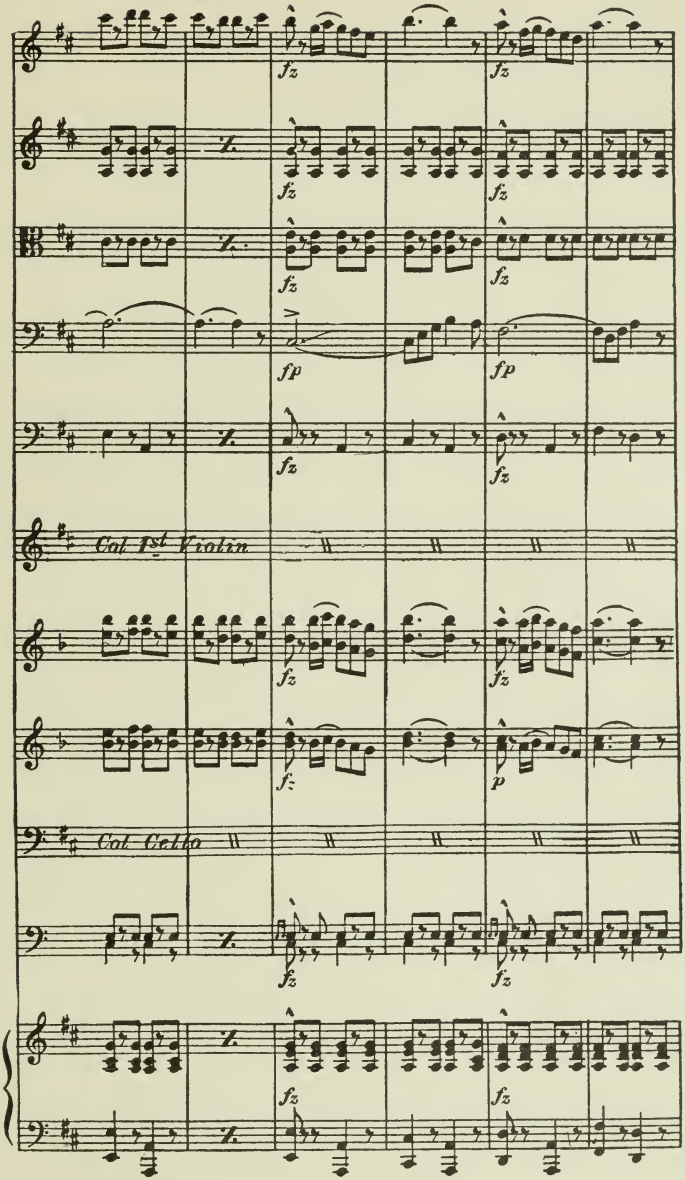
It is seldom, if ever, that the amateur arranger who desires to transcribe an orchestra score for band will find a complete orchestra score before him. He is much more likely to have the separate parts of the piece, which, however much he may examine them, one after the other, will not give him a clear conception of the whole. He must then rescore the arrangement, a tedious but necessary process. Some arrangers, operating on the plan of "music arranged while you wait," may simply look over the leading parts and then go on with the work; but the result can only be crude and inaccurate.

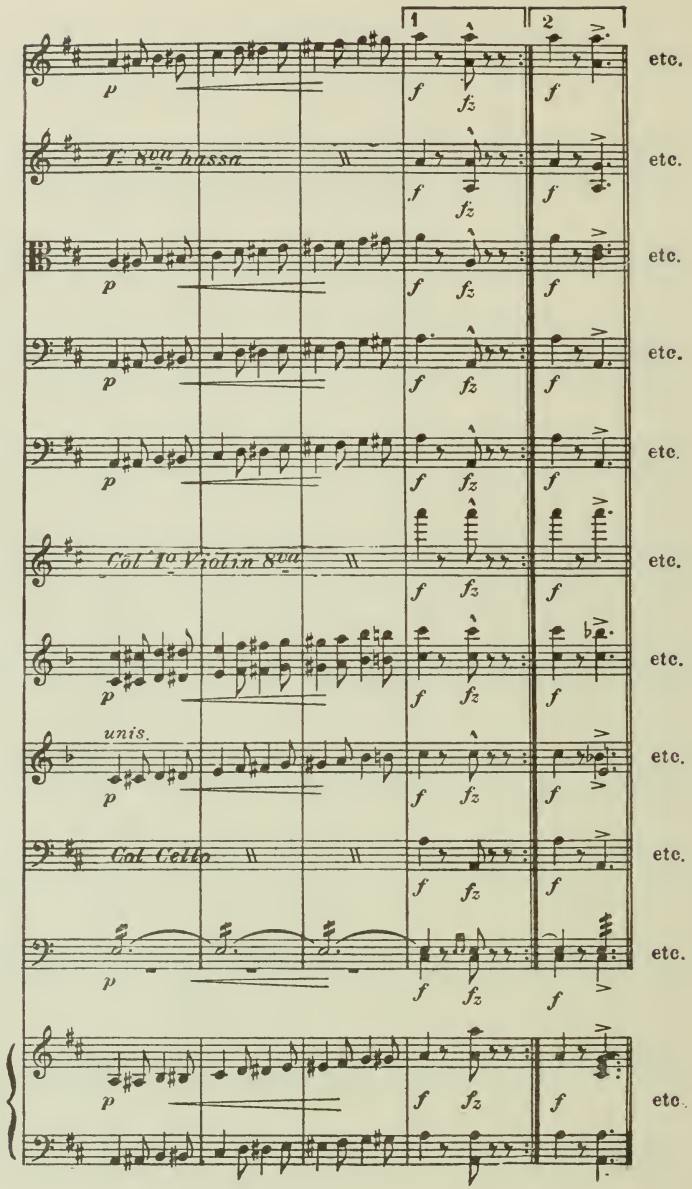
Having rescored our orchestra arrangement, we carefully scan it to find the key which would be best for the band instruments. The first consideration is, of course, to ascertain which key would be most advantageous for our melody instruments, the cornet coming in for the most consideration in the case of limited instrumentation. But we must also pay attention to the other instruments, the baritone and trombone, for instance; the orchestra arrangement may contain important features which must be given to those instruments, and their compass must also be taken into consideration when choosing the key.

This delicate question being settled, we begin our translation; it is


1st Violin.
2d Violin.
Viola
Cello.
Bass
Flute.
1st & 2d Clarinets in A.
unis.
1st & 2d Cornets in A.
unis.
Trombone.
Col. Cello
Drums.
Piano accompt
f
fz


mf
mf
mf
mf
mf
Col 1st Violin
mf
mf
mf
mf
mf
mf


fz
fp
Col 1st Violin
p
Col Cello


1
2
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
etc.
p
f
fz
8va bassa
Col 1o Violin 8va
unis.
Col Cello

indeed as much a translation as would be the rewriting of a German poem in the English language, for we must express the same ideas in a different form. In some respects it is easier to arrange for band from orchestra than from piano, because we not only have the melody and accompaniment before us, but are spared the necessity of creating effects, our task being to give an idea of the original in the most effective manner.

After due consideration, then, we adopt the key of E♭ (real key) for our band arrangement, the key for the cornets and other B♭ instruments being F. We have found that the melody will "lay well" in this key for the cornet; we have also found that the cello part, important in this case, will be effectively rendered by the baritone in that same key of F.

In the orchestra arrangement the melody is carried by first violin and flute, also by first cornet and second clarinet an octave lower, the first clarinet following the melodic rhythm with concordant notes, which effect is repeated an octave lower by the second cornet. In our band arrangement we represent these melody instruments by piccolo, clarinets and cornets; as a march must of necessity be full and solid, we must employ all our melody instruments.

In order to follow our line of reasoning, the student should constantly refer to both the orchestra and band scores (the latter shortly to be presented) and compare them; this, we believe, will make clear our meaning.

We first write the melody for the solo B♭ and E♭ cornets; then the same an octave higher for piccolo and E♭ clarinet. The melody, if given to the first B♭ clarinet in unison with the cornet, would sound too weak; an octave above, would be rather high — although possible, it would be somewhat shrill. We find it better to have our first clarinet play the same concordant notes as in the orchestra. The arranger will meet with many such instances, where it is not advisable to have the first clarinet play the melody, although its proper function is to do so.

We give the melody, also in the cornet octave, to the second and third B♭ clarinets in unison. Especially in marches, it is often most desirable to give the same part to these two instruments. We give the first cornet the same part as the first clarinet, but an octave lower, the second and third cornets having a combination of the other cornet parts and accompaniment.

The orchestra accompaniment (second violin and viola) is naturally assigned to the altos. The cello and trombone have a part which is effective, although simple. We desire it to be prominent in our band arrangement, and therefore give it to the baritone and the first and

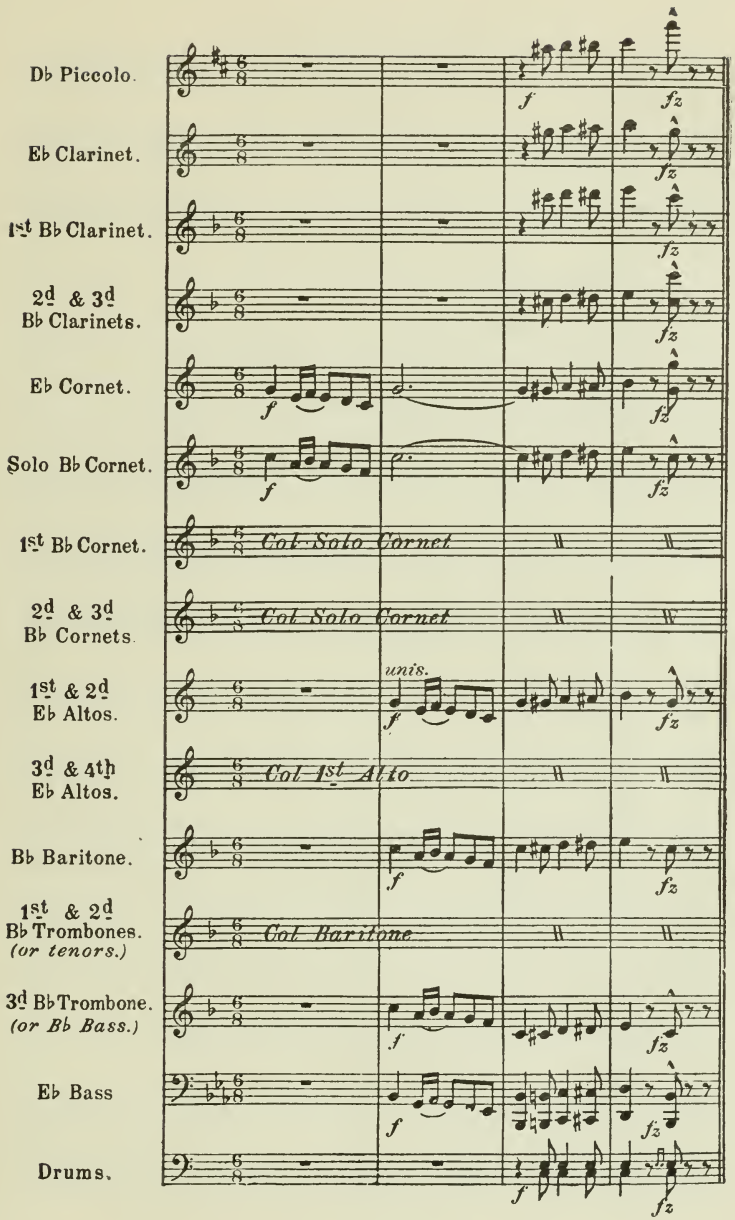
second trombones. The bass part we give to the third trombone and the E♭ bass. Here, also, we write the lowest notes in octaves.

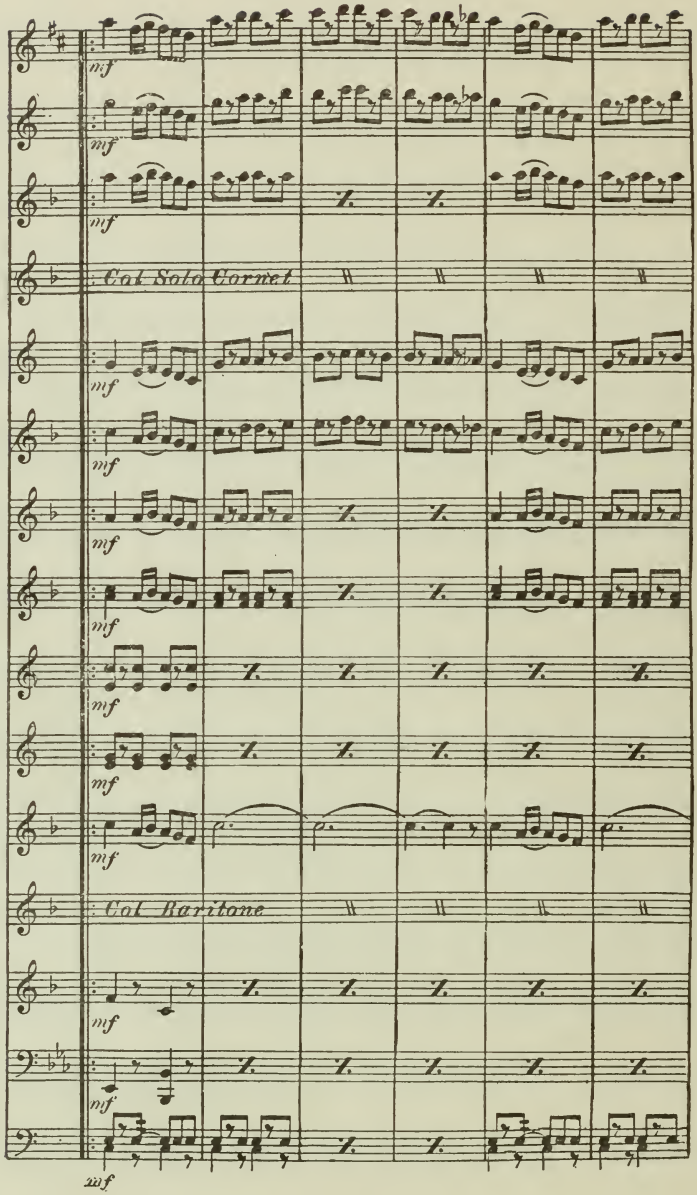
We are now left with only the drums to deal with, and see no occasion for any alterations here, so we will use the orchestra part as it is. We may even spare ourselves the trouble of rewriting this part, as all that is necessary is to say, on the drum staff: "col orchestra arrangement." Our band score is now complete, and appears in the following shape (see p. 61).

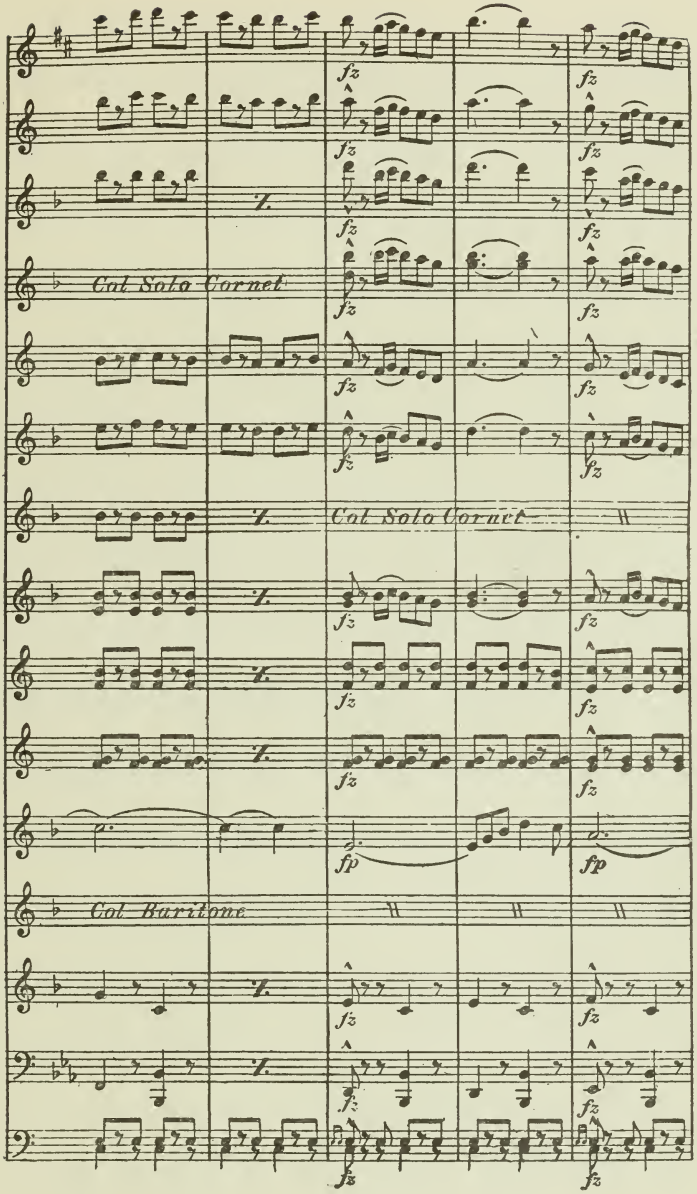
If the student is observing, he will notice that the introduction is not treated in quite the same manner in the two arrangements. In the orchestra arrangement every group of instruments is employed; while in the band arrangement we have only used brass instruments for the first two measures, giving the opening subject to the cornets, and a repetition an octave lower to the larger brass instruments in the next measure, adding the other instruments in the third measure. This goes to show that the arranger is not so strictly bound to follow the original arrangement that he cannot introduce some slight alterations, if he thinks they will be an improvement. However, in the case of standard works this is not permissible, and the arranger must conform to the original as nearly as possible.

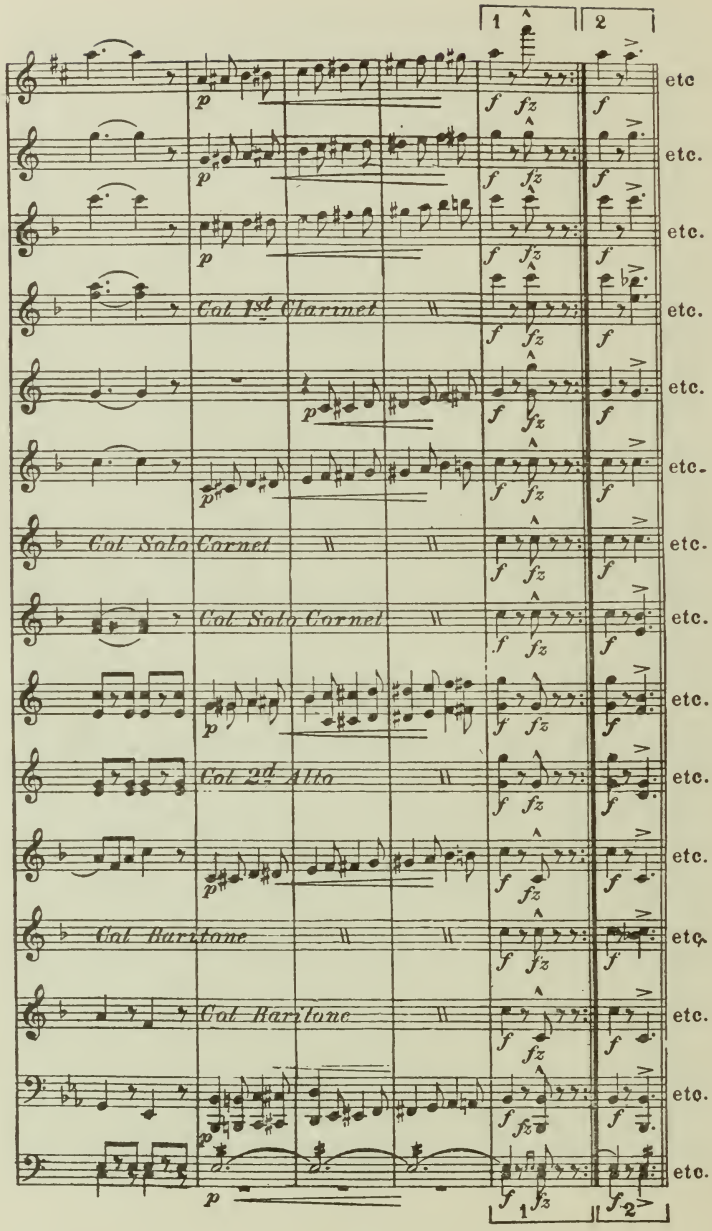
It will also be noted that there is a chromatic unison for all the instruments in the last four measures, and that the octave is broken for some of these instruments. This has been done to keep the passage within an easy compass for these instruments. The arranger will frequently meet with passages which demand treatment in this manner, and he must endeavor to do it as easily and smoothly as possible. In the present instance, the break in the octave causes an interval of a major seventh which is not easy of intonation; but no other course was open to us, as there is no more convenient place in this passage to make the break.

The student may now take some orchestra pieces, rescore them, and try to put the foregoing instructions into practice. It would seem to us that he ought to obtain satisfactory results after a few attempts.


D♭ Piccolo.
E♭ Clarinet.
1st B♭ Clarinet.
2d & 3d B♭ Clarinets.
E♭ Cornet.
Solo B♭ Cornet.
1st B♭ Cornet.
Col Solo Cornet
2d & 3d B♭ Cornets.
Col Solo Cornet
1st & 2d E♭ Altos.
unis.
3d & 4th E♭ Altos.
Col 1st Alto
B♭ Baritone.
1st & 2d B♭ Trombones. (or tenors.)
Col Baritone
3d B♭ Trombone. (or B♭ Bass.)
E♭ Bass
Drums.


mf
mf
mf
Col. Solo Cornet
mf
mf
mf
mf
mf
mf
Col. Baritone
mf
mf
mf


Col Solo Cornet
Col Solo Cornet
Col Baritone
fz
fp


1
2
etc
etc.
etc.
Col 1st Clarinet
etc.
etc.
Col Solo Cornet
Col Solo Cornet
etc.
etc.
Col 2d Alto
etc.
Col Baritone
Col Baritone
etc.
etc.
etc.

CONCLUDING REMARKS

We have omitted consideration of several band instruments, — oboe, bassoon, alto and bass clarinets, horns, trumpets, saxophones, etc., — our object having been to explain simple arranging to the amateur. For this reason we have deemed it wiser to confine ourselves to the more common and indispensable instruments; but if the student, after arriving at the present stage of development, wishes to make still further progress, he may study works of a more extended character, in which he will find the above-named instruments elaborately and fully treated. He will also find the various points which we have considered, treated in a much fuller manner than it has been possible to do in this little work, which is only intended to be elementary.

We believe that the student is now, after having received our simple directions, in a much better position than before to study and understand works constructed on a higher plane. The last advice we shall give him is to study "Kling's Modern Instrumentation and Orchestration,"* which is a complete treatise on the subject. It being one of the latest published works of this character, its contents are written in the most modern and up-to-date manner, and are authoritative. The publisher is Carl Fischer, New York.

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